

The Islamic Ornamentation in the Religious Architecture of Tlemcen: "Sidi Boumediene Mosque Model"

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Abstract:

The Islamic ornamentation in the religious architecture of Tlemcen reflects a rich cultural heritage, serving as a key element of Islamic art. It highlights the Islamic civilization and spiritual manifestations of the Islamic religion, alongside Arabic calligraphy and other Islamic arts. Mosques and schools are adorned with intricate geometric patterns and beautiful Islamic decorations, such as geometric knots and floral motifs. The meticulous details in engravings and vibrant colors give these buildings a unique character. This decorative style reflects a commitment to beauty and precision in Islamic design while maintaining the spiritual essence in religious construction.

In addition, distinctive geometric arches and beautiful calligraphic decorations on the walls stand out, enhancing the artistic and cultural character of Islamic architecture in Tlemcen. The influence of Andalusian elements is evident in some buildings, highlighting cultural and artistic exchange in this region.

Keywords: Decoration; Art; Architecture; Design; Decor.

1. INTRODUCTION

Islamic art is the art produced by Muslims or artists living in the Islamic world, and Islamic art itself is not inherently an art that avoids imitation, abstraction, or ornamentation. Rather, it is an art characterized by philosophical and intellectual rules and principles rooted in the comprehensiveness of Islam as a religion covering all aspects of life, including art, which is considered one of the endeavors undertaken by a human being or a Muslim artist.

Islamic art is an integral part of Islamic civilization, which itself arose and flourished through its interaction with preceding local civilizations as well as those that coexisted with it through processes of amalgamation, including the Sassanian and Byzantine civilizations, among others. The philosophy of beauty in Islamic art does not depend on beauty as an end in itself; beauty is not the ultimate goal, but rather its functional use is the objective. There is absolutely no notion in Islamic art of 'art for art's sake'. Among the most important characteristics of Islamic art are abstraction- closely connected to the philosophy of Islamic art- and unity, which manifests as an intellectual truth and finds aesthetic expression in Islamic art as well.

2. Definition of Islamic Art:

Islamic art is considered the product of a philosophical vision and concepts that have shaped its features and characteristics. It is essentially a formulation of the arts that preceded it, representing a quest for truth and beauty in religion that converges in the essence of the self with art itself. Both originate from the realm of necessity, and both are a wealth for the mechanism of life⁽¹⁾.

Islamic art is not necessarily meant by this name to be art that speaks about Islam; it is not preaching or guidance. Rather, it is the art in which the Islamic conception of existence is embodied. It is the beautiful expression of the universe, life, and humanity through the perspective of the Muslim creator. It is the art that integrates beauty and truth harmoniously, as beauty is a reality in this universe, and truth is the pinnacle of beauty, where both meet at the summit that unites all truths of existence⁽²⁾.

Islamic art has a geographical extension that distinguishes it from all other arts that preceded it. It quickly spread across the regions under Islamic rule, which extended from the Atlantic Ocean to the Arabian Gulf in the east, encompassing the Anatolian plateaus and Armenia to the north, and Central Africa and the Indian Ocean to the south⁽³⁾.

3. Islamic Ornamentation:

“God Almighty said in His Book: (O children of Adam! Take your adornment at every place of worship, and eat and drink, but do not be excessive; indeed, He does not like the extravagant. Say, who has forbidden the adornment of God which He has brought forth for His servants, and the good things of provision? Say, they are for those who believe in the life of this world, but exclusively theirs on the Day of Resurrection. Thus, we explain the signs for a people who know)”⁽⁴⁾.

These verses are the best evidence that Islamic art is ornamental in nature, striving for adornment and beauty, for everything that surrounds the Muslim artist is beauty itself. We often find these decorations in mosques, palaces, pulpits, ceilings, and walls, as they adopted this art as a means to beautify life and enjoy its adornment- a desire that is itself inspired by the principles of Islam⁽⁵⁾.

The types of ornamentation can be divided into four categories, namely:

- Geometric ornamentation
- Floral or vegetal ornamentation
- Ornamentations with human and animal forms
- Arabic calligraph

3.1. Geometric Ornamentation:

Geometric ornamentation is a type in which geometric shapes such as squares, triangles, rectangles, and circles are used to create highly beautiful and exquisitely composed geometric formations. The harmony among the units manifests in a regular geometric form that reveals the beauty of the composition and the concordance and harmony between its intersecting,

interlocking, successive, cascading, and symmetrical lines, whether in bands or fills in an engaging form⁽⁶⁾.

The author Adel Al-Alousi also asserts that the skill of Muslims in this type of ornamentation was not primarily founded on refined sensibility or natural talent but was based on extensive knowledge of scientific geometry and formal schooling. The Muslim craftsman inherited this art from his teachers, who considered it a secret among the secrets of the craft⁽⁷⁾.

Dr. Abdul Aziz La'araj considered geometric ornamentation to be the primary unifying characteristic of Islamic art alongside its forms, contents, and styles, representing a unique unity of time and place.

-Place: Because it encompassed all regions of the Arab-Islamic countries.
-Time: Because the history of Islamic art has been abundant with it since the inception of its formation until today⁽⁸⁾.

According to the writer Adel Al-Alousi, human interest in geometric ornamentation stems from two reasons:

First: An innate inclination toward abstraction.

Second: The constraints imposed by the material and the tools during the production process.

3.2. *Floral Ornamentation*

The earliest appearance of vegetal ornamentation dates back to the Umayyad period, where it was also known as arabesque or the art of foliage. These vegetal motifs were inspired by natural forms, drawing upon plants and their components such as leaves, stems, roots, and buds. In this type of ornamentation, it is often possible to identify the type of plant represented; however, some examples diverge from natural forms. To transform a natural unit into a decorative one, adherence to specific artistic principles is required⁽⁹⁾.

- Preservation of the characteristics and distinctive features of the unit, ensuring that modification does not distort its identity but rather imparts simplicity and ornamental beauty.
- Compatibility of the selected unit with the artistic and industrial purpose for which it is intended.

- Proportionality of the modified units' size to the surface to be decorated, according to their distance or proximity to the viewer.

The method of creating vegetal ornamentation began with the craftsman first sketching the desired decorative design, after which the form was divided into sections. This approach contributed to greater speed and precision in execution. Bishr Faris described vegetal ornamentation as follows: "Thanks to its flexibility, the pattern appears at times revolving, at times tense, and often twisting. Rarely can the craftsman fully apprehend its course or boundless direction-it proceeds endlessly without weariness, never quite reaching its intended goal, its rhythm unceasing yet captivating"⁽¹⁰⁾.

Vegetal ornamentation is used to decorate walls, doors, domes, household furniture, carpets, book pages, glass, ceramics, fabrics, and various other objects.

3.3. Ornamentation featuring human and animal forms:

In Islamic art, depictions of living creatures were employed in materials such as wood, copper, textiles, glass, and ceramics. These elements were often placed within geometric shapes and spaces, arranged according to principles of opposition and symmetry. Composite fantastical forms became widespread, such as birds with human faces and the winged horse with a human face (al-Burāq). Muslim artists also produced metal vessels in animal shapes'⁽¹¹⁾.

However, this type of ornamentation was prohibited by some religious scholars to prevent any association with idol worship, while others permitted figurative representation when intended solely for purposes of adornment and aesthetic beauty.

3.4. Arabic calligraphy:

The use of Arabic calligraphy in the decoration of Islamic architecture emerged toward the end of the 7th century CE. The oldest known inscription in Islamic architecture is found in the Dome of the Rock in Jerusalem⁽¹²⁾.

It consists of a written frieze above the arches of the central octagon on the southeastern side of the dome, featuring a Qur'anic text, the date of completion of the dome's construction, and the name of the caliph who commissioned it. The inscription is rendered in simple Kufic script, which relies on a geometric path in shaping its letters, a style well suited to the mosaic medium in which it was executed⁽¹³⁾.

As for the inscribed themes, they are diverse, primarily consisting of Qur'anic verses, religious phrases glorifying Islam, supplications, expressions praising rulers, philosophical sayings and maxims, as well as poetic verses. In some inscriptions, texts include the name of the ruler or prince who commissioned the construction, his lineage, and the circumstances surrounding the building process. In later periods, however, some inscriptions also featured meaningless words, used purely for their ornamental value⁽¹⁴⁾.

Each region within the Islamic world developed local styles for using Arabic calligraphy in architectural decoration. These styles were continuously renewed and evolved through mutual influences. Various types of scripts, derived from those used in manuscripts, were employed in architecture, often with modifications to suit the scale and materials of monumental buildings. These adaptations significantly affected the shapes of the letters, their terminals, and their curves⁽¹⁵⁾.

The simple Kufic script was the most widely used in architectural decoration, if not the only script, until the 11th century CE. It spread from the Islamic East to the Western Islamic regions, with the earliest examples found in the Great Mosque of Kairouan and in the frame of the mihrab of the Great Mosque of Cordoba⁽¹⁶⁾.

In addition to the simple Kufic script, other types include foliated Kufic, floral Kufic, interlaced Kufic, geometric Kufic, and architectural Kufic.

In the 9th century CE in the Islamic East, a new script emerged called the Naskh script, which gained great prominence. During the Almoravid period, it spread from the East to the Islamic West. Modifications were introduced in Al-Andalus, giving rise to a new form known as the

Maghrebi-Andalusian script. Its use became widespread during the Almohad dynasty in the 12th century CE, and by the 14th century CE, it had become the primary script for decorating Islamic architecture, supplanting the Kufic script⁽¹⁷⁾.

4. Overview of the Sidi Boumediene Mosque:

Located in the northeast of Tlemcen, the Al-Abbad Mosque sits on the slope of a steep mountain. The core of this mosque originally served as a ribat-a place of spiritual retreat for ascetics and Sufis, and a station for warriors defending the city and region against external raids and attacks launched by hostile tribes or neighboring countries. At the end of the 6th century AH (12th century CE), the pious Andalusian saint Abu Madyan Shu‘ayb ibn al-Husayn journeyed from Bijaya toward Fez, but died at ‘Ayn Taqbalet near Tlemcen before reaching this ribat, then known as Al-Abbad. His body was transferred and buried there in 596 AH (1197 CE), a fact that gave the district its enduring fame.

It then became known as ‘Abbad Sidi Boumediene,’ and a mausoleum was constructed there. Sheikh ‘Abd al-Salam al-Tunisi, the mentor of ‘Abd al-Mu‘min, the founder of the Almohad state, was also buried alongside him. In this district, namely the ‘Abbad quarter,’ and adjacent to the mausoleum of Shaykh Abu Madyan Shu‘ayb to the east, the mosque was built by order of the Marinid Sultan Abu al-Hasan in 739 AH / 1339 CE. It was founded on sloping ground and consists of a rectangular prayer hall, modeled after the Grand Mosques of Tlemcen and Nedroma.

The mosque contains twenty square-shaped pillars. At the rear of the prayer hall, to the west, there is a courtyard featuring a central water fountain and an ablution basin. On both the right and left sides around this courtyard extend arcades connected to the prayer hall. At the western end of these arcades, on both the left and right sides, are two small chambers elevated above the mosque courtyard, designated for women⁽¹⁸⁾.

At the western rear of the Sidi Abu Boumediene Mosque, there is a large main door crafted from hard wood, adorned with large and beautiful

copper nails, and featuring a traditional massive lock with an intricately decorated bronze plate. At the rear of the mosque, on the right side, stands the mosque's square minaret, richly decorated with exquisite carvings that add splendor and magnificence to the mosque and the entire district. Much of the mosque and the mihrab are adorned with intricate carvings and Quranic verses.

The mosque has two additional side entrances on the right and left sides, and a fourth entrance specifically dedicated to the prayer for the deceased, located on the northern left behind the mihrab⁽¹⁹⁾.

At the rear left of the mosque, there is a room dedicated to teaching children the Holy Quran, which is considered part of the prayer hall. This is mentioned in the book *Al-Musnad Al-Sahih Al-Hasan fi Mahasin Mawlana Abi al-Hasan*, which also records the appointment of a preacher there whose father, Marzouk Al-Jad, served as the principal preacher in the mosque's nucleus or at the mausoleum of Abu Madyan adjacent to it on the west. This site originally functioned as a ribat for worship and teaching. The ruins of Marzouk's family home remain to this day. Among those who studied there were Abd al-Rahman ibn Khaldun, his brother Yahya, Ibn Marzouk Al-Khatib, his grandson, and the judges from the Al-Aqbani family, among others. Their renown extended widely across the Maghreb, Andalusia, and even the Mashriq⁽²⁰⁾.

One notable feature of this mosque is that it has preserved its original architectural layout to the present day, despite numerous modifications it has undergone; nevertheless, it continues to withstand the changing times⁽²¹⁾.

The 'Abbad Mosque is attributed to the venerable Sheikh of Sheikhs, the noble saint Sidi Abi Madyan Shu'ayb, and it is often referred to as the Sidi Boumediene Mosque, named after the Sufi Sheikh Abi Madyan who is buried at this site. This mosque, along with its adjoining school and mausoleum, is considered among the most significant centers that grant the city of Tlemcen its authentic Islamic and artistic heritage, imparting a remarkable Islamic character deeply rooted in the city's historical essence.

4.1.The Ornamentation of the Sidi Boumediene Mosque:

This mosque was built adjacent to the mausoleum of Sidi Boumediene. Upon exiting the mausoleum, one encounters the mosque's main gate, surmounted by a horseshoe arch adorned with geometric and vegetal motifs. Above the arch runs an inscription band bearing the full name of the mosque's founder and the date of its construction. A staircase of thirteen steps ascends to the gate. This transitional area, from the arch to the gate, is covered by a muqarnas dome.

On the eastern side of the gate wall, a staircase leads to the ablution hall. The gate itself is crafted from wood covered with copper and features geometric decorations with central vegetal motifs. It also includes an eight-pointed star and sixteen-pointed star patterns. Iron nails arranged in straight lines border all edges of the gate. Additionally, there are two knockers adorned with geometric and vegetal patterns. Above the gate is a horseshoe arch decorated with geometric, vegetal, and calligraphic motifs, extending onto the eastern and western walls as well.

4.2.Ornamentation of the Mosque Gate:

The gate of the Sidi Boumediene Mosque is considered one of the most beautiful gates of Islamic religious buildings from that era. This massive gate captivates visitors' attention with its exquisite and diverse ornamentation, where the leafy zellij tiles with their cool colors blend harmoniously with the plaster's warm yellowish hue.

The technique of piercing (takhrim) was also employed, which involves outlining the subject and elements to be pierced on metal surfaces using a paper pattern or similar template. Then the desired holes and openings are created using drills and cutting or engraving tools⁽²²⁾.

4.3.Ornamentation of the Prayer Hall:

The ornamentation of the prayer hall in the Sidi Boumediene Mosque consists of stucco decorations. The walls of the prayer hall, arcades, arches, and the mihrab are all adorned with intricately carved stucco motifs. Even the ceiling is decorated with geometric patterns crafted from stucco. These

simple stucco carvings primarily feature lozenge shapes centered by an arrow-like form enclosing a circle. This type of lozenge was commonly used to adorn less significant surfaces in Marinid and Zayyanid architecture.

The prayer hall contains twelve columns. Inscriptions can be seen on the columns preceding the mihrab, recording the date and year of the mosque's construction. The column on the left shows a groove caused by its removal and reinstallation, while the other columns have undergone restoration using cement and lime. The walls are painted alongside the carpets and cupboards holding books, with decorative motifs found between the sides of the inner columns.

4.4.Ornamentation of the Minaret:

The minaret is the place where the call to prayer is announced. Al-Lahbani described it as 'the manara,' meaning the tower or the pulpit. The term 'minaret' is an Islamic one, derived from the verb 'adhana,' meaning to call for prayer. This term only appeared after the Islamic conquest of the Levant and Egypt, when the first minarets in the Islamic world began to be built in Damascus and Egypt⁽²³⁾.

The minaret of Sidi Boumediene is of the Moroccan square style. Ibn Marzouk said: 'The minaret (ṣawma'a) is exceptionally beautiful and exquisitely crafted. Each of its four sides differs in design and details. Its neighboring balconies were valued at three hundred and seventy gold dinars⁽²⁴⁾.

The minaret is located at the northwest corner of the mosque. The ornamentation of the north and west facades of the main tower consists of a lower panel featuring a decorative arch, surmounted by a large panel covered with a network of geometric lozenges. The decoration on the south and east facades is limited to a network of geometric lozenges. The ornamentation on the north and east facades begins with a square panel centered by an arch composed of three intertwined braids forming a knotted arch pattern.

The exterior of the minaret is adorned with arches, and its top is made of colored ceramics shaped into circular flowers and triangles. At the top, there are three small arched windows. The minaret consists of twenty

crowns, with five crowns on each side; each crown features five tiers. The uppermost and final level is square-shaped, with a rectangular space in the middle for the muezzin. The upper half is decorated with recessed mosaic and vegetal motifs, while the lower half contains a southern-facing door. The three other sides each have a small horizontal arched window. Inside the minaret, there is a wooden door. The minaret has fifteen floors, each with six steps, and it was constructed using brown bricks.

4.5. Ornamentation of the Mihrab:

At the entrance to the mihrab, there is a horseshoe arch supported by two columns made of pure marble, each topped with capitals engraved in Andalusian script. The surrounding decoration features colors of blue, red, yellow, and green. Twenty-three contiguous arches encircle the external dome of the mihrab, which is adorned with stained glass in yellow, blue, green, and red hues. Inside the mihrab are seven connected arches: five large ones and two smaller ones at the ends. The geometric eight-sided dome of the mihrab is crafted from stucco, with decorations and inscriptions on each side. The arches of the mihrab feature vegetal motifs that extend to the midpoint of the mihrab.

On the left side of the mihrab, there is a small wooden cabinet that was relocated from its original position to a higher place. It is said that in the past it was used to store small items such as keys. At its base, one can observe a crescent shape surrounding a star, though half of the star's metal covering has been lost.

The ornamentation of the Sidi Boumediene Mosque can be summarized in terms of its types as follows:

4.6. Geometric Ornamentation:

The geometric ornamentation in the Sidi Boumediene Mosque appears simple, without excessive outlining. It seems the Marinid artist preferred to avoid heavy detailing, softening the intensity of lines and curves, and thus moderating the overall sharpness of the geometric decoration.

- The star-shaped plates differ from one plate to another by an increase or decrease in their number and are distributed over various areas of the

mosque. The craftsman did not restrict their execution to a single material; rather, they were embossed on plaster and bronze and painted on ceramics. These star-shaped plates adorn the windows of the mihrab façade as well as the mosque door, which is decorated with geometric ornaments featuring circular star-shaped plates⁽²⁵⁾.

- The stars: These are multi-pointed, with the number of points reaching up to sixteen. They are classified among other decorative elements, and this type of decoration can be found on the mosque's door.
- The quadrilateral and hexagonal shapes occupy the upper parts of the mosque walls, the decorations of the mihrab façade, and the ornamentation of the prayer niche.
- The circular shapes: They are of two types, simple circular shapes and engraved circles. This type of decoration adorns the lattice of lozenge-shaped patterns on the mosque's minaret and the mihrab.

4.7. Islamic Botanical Ornamentation:

The botanical decorations occupy a significant area in the Sidi Boumediene Mosque, contrasting with the geometric ornamentation.

- Botanical stems: These are slender forms originating from an indeterminate point and terminating in an imaginary fan shape, predominantly characterized by curves and appearing as decorative circular rings.
- Imaginary fans: The examples painted in the Sidi Boumediene Mosque exhibit a predominantly simple style. They are smooth and usually consist of two segments differing in shape, resulting in varied palm fan designs. The artisan may have intended to vary the segments' shapes to avoid repetition and highlight this motif in diverse forms, although its original concept remains singular.

4.8. Calligraphic Ornamentation:

- ❖ Promotional inscriptions: These are texts and phrases placed by the artisan, repeated in long bands with the intention of enhancing the mosque's aesthetic dimension.

❖ **Quranic texts:** These consist of verses from the Holy Quran, aimed at spreading Islam and encouraging the worship of Allah, the sole Creator. These texts are inscribed in two scripts: Kufic and Naskh.

- **Kufic script:** It is characterized by the straightness of its letters and the considerable height of the letters Alif and Lam.
- **Naskh script:** It is distinguished by being inscribed on long, narrow bands that form frames for other decorative panels.

Among the most important inscriptions and texts engraved in the Sidi Boumediene Mosque are:

- "In the name of Allah, the Most Gracious, the Most Merciful. May Allah bless our Master Muhammad and his family and grant them peace."
- "Praise be to Allah, Lord of the Worlds. It is decreed to build this blessed mosque and madrasa."
- "Praise be to Allah alone. Our master, Sultan Abu Yusuf Yaqub bin Abd al-Haqq, may Allah support and grant him victory, ordered the construction of this blessed mosque in the year seven hundred and thirty-nine. May Allah benefit them."
- "The son of our master, the Prince of the Muslims, the warrior in the path of the Lord of the Worlds, Abu Yusuf bin Abd al-Haqq, may Allah uphold his command and eternalize his righteous deeds, and may God purify his face in acts of righteousness"⁽²⁶⁾.

5. CONCLUSION

In conclusion, Islamic art is among the most refined and beautiful arts. Islamic ornamentation is the enchanting touch of this art, and this is why Islamic art is often called ornamental art. Ornamentation occupies a significant place in creativity and beauty beyond what other art forms have achieved. In fact, all arts have drawn upon it, especially architecture; no matter how grand the architecture, it is incomplete without decorative inscriptions and patterns that enhance its elegance and beauty. This is evident in Islamic buildings such as mosques. This was clearly observed

during our study of one aspect of Islamic art in the city of Tlemcen-the Sidi Boumediene Mosque. Its beauty and sophistication lie in the harmonious blend of grand, precise architecture and inscribed, painted, and colored ornamentation in all types. This ornamentation appears almost as a defining trait across all fields of Islamic art.

Bibliography List:

❖ *The Holy Quran.*

❖ **The references:**

1. Anwar Al-Rifai, History of Art among Arabs and Muslims, Dar Al-Fikr, Cairo, 2nd edition, 1997
2. Rachid Bourouiba, Archaeological Inscriptions in Algerian Mosques. (Translated by Ibrahim Shabukh), manuscript for publication, Tlemcen - Algeria, 2011
3. Zaki Muhammad Hassan, In Islamic Arts, Hindawi Foundation for Education and Culture, Cairo, 2012.
4. Adel Al-Alousi, Masterpieces of Islamic Art, The world of books Publishing, Cairo, 2003.
5. Abdel Sattar Hussein Abu Hashim, Islamic Art Geometry, Dar Al-Talaei, Cairo, 1905.
6. Abdel Aziz Farah, Tlemcen: The City and the Mihrab, (no date).
7. Abdel Aziz Laradj, The Aesthetics of Islamic Art in the Marinid Establishments in Tlemcen, Dar Al-Malkia, Algiers, (no date)
8. Abdel Karim Azzouq, The Development of Minarets in Algeria, Ibn Badis Publishing Company, Algeria, 2011.
9. Afif Bahansi, Islamic Arab Art in Its Early Formation, Dar Al-Fikr, Cairo, 1st edition, 1983.
10. Inayat Al-Mahdi, Masterpieces of Art in Islamic Ornamentation, Ibn Sina Library, Cairo, 1993.
11. Laila Fouad Abu Hujlah, History of Art: Emergence and Development, Arab Society Library, 1st edition, 2011.
12. Mubarak Boutarn, Religious Monuments in the Central Maghreb, Kunooz Al-Hikmah Publishing House, Algeria, (no date)

13. Mohamed Abdel Aziz Marzouk, *Islamic Decorative Arts in the Maghreb and Andalusia*, Dar Al-Thaqafa, Cairo, 1970.
14. Mohamed Qutb, *The Methodology of Islamic Art*, Dar Al-Mashriq, Cairo, 1981
15. Nagaat Shaker Mohamed Zidan, *The Impact of Islamic Creed among Muslims*, King Fahd National Library, Riyadh, 1978.
16. Yahya Bouaziz, *Ancient Mosques in the Algerian Maghreb*, Algeria Publications, 2011.

❖ Foreign References

1. KHATIB, A., & SIJELMASSI, M. *L'art calligraphique de L'Islam*, Gallimard, 1995.
2. Marçais George. *L'architecteur musulmane d'occident: Tunisie, Algérie, Maroc, Espagne et Sicile*. Cambridge, University Press: Published, under the auspices of the Gouvernement Général of Algeria, 2015.

University Theses:

1. Belhadj Terchaoui, *The Zayyanid and Marinid Minarets in Tlemcen*. Master's dissertation, University of Tlemcen, Department of Folk Arts, 2002.
2. Mohamed Lakhdar Oulmi, *Architectural Ornamentation during the Marinid and Zayyanid Periods*, Doctoral thesis, Faculty of Humanities, 2012-2013.

Scientific Conferences

1. Ministry of Religious Affairs and Endowments, *Islamic Tlemcen between Urban and Architectural Heritage and Artistic Legacy*, works of the International Symposium in Tlemcen, Volume 1, Tlemcen, 2011.

Footnotes:

- (1) Mohamed Qutb, *Methodology of Islamic Art*, Dar Al-Mashriq, Cairo, 1981, p. 50
- (2) Anwar Al-Rifa'i, *History of Art among Arabs and Muslims*, Dar Al-Fikr, Cairo, 2nd edition, 1997, p. 9
- (3) Leila Fouad Abu Hujlah, *History of Art: Origin and Development*, Arab Society Library, 1st edition, 2011, p. 129.
- (4) Surat al-A'rāf), verses: 31–32.

- ⁽⁵⁾Najat Shakir Muhammad Zaidan, *The Impact of Islamic Doctrine on Muslims*, King Fahd National Library, Riyadh, 1978, p. 74.
- ⁽⁶⁾Abdel Sattar Hussein Abu Hashem, *The Geometry of Islamic Art*, Al-Talaea Publishing House, Cairo, 1905, p. 7.
- ⁽⁷⁾ Adel Al-Alousi, *Masterpieces of Islamic Art*, Alam al-Kutub, Cairo, 2003, p. 26
- ⁽⁸⁾Abdul Aziz La'araj, *The Aesthetics of Islamic Art in the Marinid Establishments in Tlemcen*, Dar Al-Malkiya, Algeria, n.d., p. 26
- ⁽⁹⁾ Zaki Muhammad Hasan, *Fi al-Funun al-Islamiyya [In Islamic Arts]*, Hindawi Foundation for Education and Culture, Cairo, 2012, p. 36.
- ⁽¹⁰⁾ Abd al-Aziz La'raj, *ibid.*, p. 20.
- ⁽¹¹⁾ Inayat al-Mahdi, *Masterpieces of Art in Islamic Ornamentation*, Ibn Sina Library, Cairo, 1993, p. 9.
- ⁽¹²⁾ Afif Bahnasi, *Islamic Art at the Dawn of Its Formation*, Dar al-Fikr, Cairo, 1st ed., 1983, p. 66.
- ⁽¹³⁾ *Ibid.*, p. 66.
- ⁽¹⁴⁾ Khatib, A., & Sijelmassi, M., *L'art calligraphique de l'Islam*, Gallimard, 1995, p. 194
- ⁽¹⁵⁾ *Ibid.*, p. 195.
- ⁽¹⁶⁾ Marçais George. *L'architecteur musulmane d'occident: Tunisie, Algérie, Maroc, Espagne et Sicile*. Cambridge, University Press, 2015, p. 171.
- ⁽¹⁷⁾ Mohammed Lakhdar Aouamli, *Architectural Ornamentation in the Marinid and Zayyanid Eras*, PhD dissertation, Faculty of Humanities, 2012-2013, p.68.
- ⁽¹⁸⁾ Yahia Bouaziz, *The Ancient Mosques in Algerian Morocco*, Algeria Publications, 2011, p.123.
- ⁽¹⁹⁾ Abdul Aziz Farah, *Tlemcen, Al-Mihrab City*, (n.d.), pp. 15-16.
- ⁽²⁰⁾ Yahia Bouaziz, previous reference, p. 125.
- ⁽²¹⁾ Mubarak Boutarn, *Religious Monuments in Central Maghreb*, Kanouz Al-Hikma Foundation, Algeria, (n.d.), p. 120.
- ⁽²²⁾ Muhammad Abdul Aziz Marzouk, *Islamic Decorative Arts in the Maghreb and Andalusia*, Dar Al-Thaqafa, Cairo, 1970, p. 96.
- ⁽²³⁾ Belhaj Tarshaoui, *The Zayyanid and Marinid Minarets in Tlemcen*, Master's Thesis, University of Tlemcen, Folklore Major, 2002, p. 96.
- ⁽²⁴⁾ Abdelkarim Azouq, *The Evolution of Minarets in Algeria*, Ibn Badis Publishing House, Algeria, 2011, p. 85.
- ⁽²⁵⁾ Ministry of Religious Affairs and Endowments, *Islamic Tlemcen between Architectural Heritage and Artistic Legacy*, Proceedings of the International Symposium in Tlemcen, Vol. 1, Tlemcen, 2011, p. 238.
- ⁽²⁶⁾ Rachid Bourouiba, *Archaeological Inscriptions in Algerian Mosques*. (Translated by Ibrahim Shabukh), Manuscript for Publication, Tlemcen – Algeria, 2011, p. 83.